

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS**

In re application of:)	
)	Examiner: Nagmeh Mehrpour
Uhlik et al.)	
)	Art Unit: 2617
Application No: 09/753,266)	
)	Confirmation No.: 1475
Filed: December 29, 2000)	
)	
For: CHANNEL ALLOCATION BASED ON)	
RANDOM PLUS PLANNED PROCESSES)	
_____)	

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Assistant Commissioner For Patents
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APPEAL BRIEF
IN SUPPORT OF APPELLANTS' APPEAL
TO THE BOARD OF PATENT APPEALS

Applicants (hereinafter "Appellants") hereby submit this Brief in support of an Appeal from a decision of a Final Office Action mailed November 5, 2007 for the above-referenced case. Appellants respectfully request consideration of the accompanying Appeal by the Board of Patent Appeals for allowance of the invention as presently recited in the claims.

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I. REAL PARTY IN INTEREST

The real party in interest of the above-referenced U.S. Patent application is ArrayComm, LLC of 2450 North First Street, Suite 200, San Jose, California, 95131-1014, to whom the application has been assigned.

II. RELATED APPEALS AND INTERFERENCES

To the best of Appellants' knowledge, there are no prior or pending appeals, interferences, or judicial proceedings related to the subject matter of this appeal that will directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

No Claims have been canceled in the above-referenced application.

Claims 1-91 are pending in the above-referenced application.

Claims 1-91 were finally rejected in the Final Office Action mailed November 5, 2007.

These claims are the subject of this Appeal.

IV. STATUS OF AMENDMENTS

In response to the Final Office Action mailed November 5, 2007, Appellants filed a Notice of Appeal on April 4, 2008, which was entered April 4, 2008.

This Brief is submitted after the filing of the Notice of Appeal.

A copy of all claims on appeal is attached hereto as Appendix A.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The claims are summarized as follows. In the summary below, the referenced portion of the Specification should be construed as only representative of the teachings that support the claimed feature(s). Thus, the cited portions are sufficient to support the claim, but are not necessarily the exclusive support in the Specification for such claim features.

1. A method of operating a base station comprising:

Receiving a random access request for a traffic channel of a plurality of traffic channels on a first random traffic channel of the plurality of traffic channels, the traffic channels to be selectively allocatable by the base station for communication with a user terminal; (p. 14, line 16 to p. 15, line 2; p. 17, line 21 to p. 18, line 4; p. 34, lines 15 to 18; Fig. 3; Fig. 9)

Determining whether a traffic channel of the plurality of traffic channels is available to allocate to the requestor; and (p. 10, line 20 to p. 11, line 17; p. 5, line 14 to p. 6, line 4; Fig. 3; Fig. 9)

Communicating to the requestor whether a traffic channel of the plurality of traffic channels is available. (p. 15, lines 3 to 16; p. 18, lines 1 to 4; Fig. 3; Fig. 9)

16. (Previously Presented) A method of operating a user terminal comprising:

Sending a request for a first unallocated traffic channel of a plurality of traffic channels on the first unallocated traffic channel to access a network; and (p. 13, lines 6 to 11; p. 14, line 16 to p. 15, line 2; p. 17, line 21 to p. 18, line 4; p. 34, lines 15 to 18; Fig. 3; Fig. 9)

Receiving an indication of availability of a traffic channel of the plurality of traffic channels. (p. 15, lines 3 to 16; p. 18, lines 1 to 4; Fig. 3; Fig. 9)

34. (Previously Presented) A method of providing access to a network comprising:

receiving a request for access on a first random traffic channel of a plurality of channels at random from a network subscriber, each channel of the plurality of channels suitable for accessing the network; and (p. 13, lines 6 to 11; p. 14, line 16 to p. 15, line 2; p. 17, line 21 to p. 18, line 4; p. 34, lines 15 to 18; Fig. 3; Fig. 9)

granting access to the network on a channel of the plurality of channels based on an evaluation of factors. (p. 15, lines 3 to 16; p. 18, lines 1 to 4; Fig. 3; Fig. 9)

36. (Previously Presented) A method of accessing a network comprising:

requesting access to the network on a first random traffic channel of a plurality of channels, each channel of the plurality of channels suitable for accessing the network; and (p. 13, lines 6 to 11; p. 14, line 16 to p. 15, line 2; p. 17, line 21 to p. 18, line 4; p. 34, lines 15 to 18; Fig. 3; Fig. 9)

receiving access to the network on a channel of the plurality of channels based on an evaluation of factors. (p. 15, lines 3 to 16; p. 18, lines 1 to 4; Fig. 3; Fig. 9)

41. (Previously Presented) A method comprising:

Receiving a request for an access channel of a plurality of channels on a first unallocated channel of the plurality of channels; (p. 14, line 16 to p. 15, line 2; p. 17, line 21 to p. 18, line 4; p. 34, lines 15 to 18; Fig. 3; Fig. 9)

Determining whether an access channel of the plurality of channels is available; and (p. 10, line 20 to p. 11, line 17; p. 5, line 14 to p. 6, line 4; Fig. 3; Fig. 9)

Communicating to the requestor whether an access channel of the plurality of channels is available. (p. 15, lines 3 to 16; p. 18, lines 1 to 4; Fig. 3; Fig. 9)

60. (Previously Presented) An apparatus comprising:

means for receiving a request for an access channel of a plurality of channels on a first unallocated channel of the plurality of channels; (p. 14, line 16 to p. 15, line 2; p. 17, line 21 to p. 18, line 4; p. 34, lines 15 to 18; Fig. 3; Fig. 9)

means for determining whether an access channel of the plurality of channels is available; and (p. 10, line 20 to p. 11, line 17; p. 5, line 14 to p. 6, line 4; Fig. 3; Fig. 9)

means for communicating to the requestor whether an access channel of the plurality of channels is available. (p. 15, lines 3 to 16; p. 18, lines 1 to 4; Fig. 3; Fig. 9)

63. (Previously Presented) A system comprising:

a processor; and (Fig. 9; Fig. 11)

a network interface coupled to the processor; (Fig. 9)

wherein the processor and the network interface are collectively configured to:

receive a request for an access channel of a plurality of channels on a first unallocated channel of the plurality of channels; (p. 14, line 16 to p. 15, line 2; p. 17, line 21 to p. 18, line 4; p. 34, lines 15 to 18; Fig. 3; Fig. 9)

determine whether an access channel of the plurality of channels is available; and (p. 10, line 20 to p. 11, line 17; p. 5, line 14 to p. 6, line 4; Fig. 3; Fig. 9)

communicate to the requestor whether an access channel of the plurality of channels is available. (p. 15, lines 3 to 16; p. 18, lines 1 to 4; Fig. 3; Fig. 9)

64. (Previously Presented) A machine-readable medium embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, the method comprising:

Receiving a random access request for a traffic channel of a plurality of traffic channels on a first random traffic channel of the plurality of channels, the traffic channels to be selectively allocatable by the base station for communication with a user terminal; (p. 14, line 16 to p. 15, line 2; p. 17, line 21 to p. 18, line 4; p. 34, lines 15 to 18; Fig. 3; Fig. 9)

Determining whether a channel of the plurality of channels is available to allocate to the requestor; and (p. 10, line 20 to p. 11, line 17; p. 5, line 14 to p. 6, line 4; Fig. 3; Fig. 9)

Communicating to the requestor whether a channel of the plurality of channels is available. (p. 15, lines 3 to 16; p. 18, lines 1 to 4; Fig. 3; Fig. 9)

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

CLAIM REJECTIONS UNDER 35 U.S.C. § 102

Claims 1-6, 15-16, 22, 24-27, 34-37, 40-46, 55, 57-69, 78 and 80-85 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,810,258 of Vialen et al. (hereinafter "Vialen").

CLAIM REJECTIONS UNDER 35 U.S.C. § 103

Claims 7-8, 11, 18, 47-48, 51, 70-71 and 74

Claims 7-8, 11, 18, 47-48, 51, 70-71 and 74 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Vialen in view of U.S. Patent Publication No.: 2002/0072348 A1 of Wheeler et al. (hereinafter "Wheeler").

Claims 9-10, 39, 49-50, 56, 72-73 and 79

Claims 9-10, 39, 49-50, 56, 72-73 and 79 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Vialen in view of U.S. Patent Publication No.: 2002/0087740 A1 of Castanho et al. (hereinafter "Castanho").

Claims 12-14, 52-53 and 75-76

Claims 12-14, 52-53 and 75-76 were rejected under 35 U.S.C. § 103(a) as being unpatentable over in view of U.S. Patent Publication No.: 2003/0163393 A1 of Mittal et al. (hereinafter "Mittal").

Claims 17 and 38

Claims 17 and 38 were rejected under 35 U.S.C. § 103(a) as being unpatentable over in view of U.S. Patent No. 6,006,084 of Miller et al. (hereinafter "Miller").

Claims 20 and 32-33

Claims 20 and 32-33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over in view of U.S. Patent Publication No. 2002/0065081 of Barany et al. (hereinafter "Barany").

Claims 28-29 and 30-31

Claims 28-29 and 30-31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over in view of U.S. Patent No. 5,345,596 of Buchenhorner et al. (hereinafter "Buchenhorner").

Claims 86-91

Claims 86-91 were rejected under 35 U.S.C. § 103(a) as being unpatentable over in view of U.S. Patent Publication No. 2003/0133426 of Schein et al. (hereinafter "Schein").

VII. ARGUMENT

The claims do not all stand or fall together, and thus will be argued separately. Specifically, the rejection of the claims will be argued as follows:

- A. Rejection of Claims 1-15 and 86-87, 16-33, 34-35, 36-40, and 64-85
- B. Rejection of Claims 41-59 and 88-89, 60-62 and 90-91, and 63

CLAIM REJECTIONS UNDER 35 U.S.C. § 102

- A. Rejection of Claims 1-6, 15-16, 22, 24-27, 34-37, 40, 64-69, 78, and 80-85

These claims were rejected under 35 U.S.C. § 102(e) as being anticipated by Vialen. Of these claims, 1, 16, 34, 36, and 64 are independent claims.

Each of these independent claims recites features directed to **receiving a request for a traffic channel on a traffic channel**.

Appellants note there is a fundamental technological understanding required to grasp the significance of the claims and their distinction from traditional systems. Such a grasp of the technological underpinnings of the claimed subject matter has not been evidenced in the Office Actions, which continue to cite references that are all very similar to each other, and are not directed to the subject matter of Appellants' claims. Traditionally, requests for a traffic channel or access channel are received on a channel that is **specifically dedicated** to receive such requests. Such a dedicated channel is generally referred to as a "random access channel" because it is a channel dedicated to receiving random access traffic. In contrast to what is done in traditional systems, Appellants' claims are directed to a request for a traffic channel on a traffic channel (claims 1, 16, 34, 36, and 64). Thus, in the claimed invention, **requests are received on one of the same traffic channels or network access channels** that are allocatable by the base station for communication with the user terminals for network access.

Appellants note that nowhere does the Office Action contain any reasoning or explanation as to how the claims or the cited references are being interpreted. Thus, the Office Action is devoid of reasoning, in contradiction of the duty of the Office. Per MPEP § 706 and 37 CFR 1.104(c)(2), "In rejecting claims for want of novelty or for obviousness, the examiner must cite the best references at his or her command.... The pertinence of each reference, if not apparent, *must be clearly explained* and each rejected claim specified." Emphasis added. Appellants submit that neither Appellants nor the ordinary person skilled in the art could understand from the Office Action what the pertinence of the Vialen reference is. And yet, the Office has failed to provide the clear explanation required.

As Appellants have understood, Vialen discusses resolution of contention **on a random access channel**. See Abstract. Appellants note that as suggested in the discussion above, a random access channel is not a channel that can be assigned as a resource to a requesting remote terminal. More particularly regarding the content of the reference, see col. 3, lines 1 to 2 (the invention "is arranged to **transmit a random access request message on a random access channel....**") and col. 9, lines 18 to 22 ("The [signaling] bearer is negotiated by using **common channels. The random access channel** is used in the direction of the network part 128 and **the access grant channel** is used in the direction of the subscriber terminal 150."). In both sections referred to above, the reference refers to the use of dedicated channels to handle random access requests. The Abstract further states that "contention is resolved in such a way that (420) the

radio network sublayer ... **transmits on the dedicated channel** a response message...." Thus, the Vialen, like other traditional systems, relies on the concept of a dedicated access channel.

Appellants submit that the pertinence of the reference is not clear, seeing the reference cannot be interpreted as discussing anything related to an access request on a traffic channel. If the Office is interpreting the claims and/or the cited references in a way that would seem to make the claims read on Vialen (which Appellants submit there is no such reasonable interpretation), then the Office must provide a well-reasoned explanation based in technical facts to explain the purported applicability of the reference to afford Appellants an opportunity to respond.

Appellants again submit that nowhere in the Vialen reference is there a teaching or suggestion that would disclose Appellants' invention as recited in the independent claims to one of skill in the art. Therefore, the reference fails to disclose or suggest at least one feature of the independent claims, and so the independent claims are not anticipated by the reference. Furthermore, the dependent claims necessarily include all features of the independent claims from which they depend, and so are not anticipated by the reference for at least the same reasons as the independent claims.

B. Rejection of Claims 41-46, 55, and 57-63

These claims were rejected under 35 U.S.C. § 102(e) as being anticipated by Vialen. Of the above claims, 41, 60, and 63 are independent claims.

Each of these independent claims recites features directed to **a request for a (network) access channel on an unallocated channel of multiple channels**.

The above discussion in section "A" regarding the rejection of claims of which claim 1 is a part applies equally well here. In contrast to what is done in traditional systems, Appellants' claims are directed to a request for a (network) access channel an unallocated channel of multiple channels (claims 41, 60, and 63). Thus, in the claimed invention, requests for access are **received on one of the unallocated traffic channels or network access channels** that are allocatable by the base station for communication with the user terminals for network access. The reference does not apply to receiving a random access message on an unallocated channel. Therefore, the reference fails to disclose or suggest at least one feature of the independent claims, and so the independent claims are not anticipated by the reference. Furthermore, the dependent claims

necessarily include all features of the independent claims from which they depend, and so are not anticipated by the reference for at least the same reasons as the independent claims.

CLAIM REJECTIONS - 35 U.S.C. § 103 - DEPENDENT CLAIMS

The dependent claims were rejected under various combinations of references with the primary reference, Vialen, discussed above. No combination of references cures the deficiencies of Vialen.

A. Rejection of Claims 1-15 and 86-87, 16-33, 34-35, 36-40, and 64-85

Claims 7-8, 11, 18, 70-71, and 74 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Vialen in view of Wheeler.

Claims 9-10, 39, 72-73, and 79 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Vialen in view of Castanho.

Claims 12-14 and 75-76 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Vialen in view of Mittal.

Claims 17 and 38 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Vialen in view of Miller.

Claims 20 and 32-33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Vialen in view of Barany.

Claims 28-29 and 30-31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Vialen in view of Buchenhorner.

Claims 86-87 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Vialen in view of Schein.

Appellants note that each of the above rejections is based on the defective rejection under Vialen, as discussed above. Thus, each of the rejections of these claims is defective at least for the reasons noted above. As Appellants have understood the secondary references referred to here, none is cited as curing the deficiencies of Vialen. Appellants submit that rather than curing the deficiencies of Vialen, the cited references are similarly defective. Wheeler is directed to requesting and dispatching emergency services, and is completely inapplicable to the problem solved by Appellants' claims directed to random access requests on a channel not dedicated to

random access. Castanho is directed to web browsing, and there is no explanation provided in the Office Action why the Castanho reference should be considered to be applicable to random access requests in network access grants. Mittal is directed to network-based data storage, and there is no explanation why such a reference should be considered applicable to random access requests in network access grants. Miller is directed to billing of wireless communication, and is not shown to be applicable to random access requests in network access grants. Barany is directed to selection of wireless protocols in access devices, and is not shown to be applicable to random access requests in network access grants. Buchenhorner is directed to sending channel requests at different power levels until a connection is established, and is not shown to be applicable to random access requests in network access grants. Schein is directed to assigning random access channels among different radios, and is not shown to be applicable to random access requests in network access grants.

Therefore, Appellants submit that none of the secondary references cures the deficiencies of Vialen with respect to the independent claims from which these claims depend. The references fail to disclose, whether alone or in combination, at least one feature of the invention as recited in independent claims 1, 16, 34, 36, and 64, and so fail to support a rejection of these claims.

B. Rejection of Claims 41-59 and 88-89, 60-62 and 90-91, and 63

Claims 47-48 and 51 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Vialen in view of Wheeler.

Claims 49-50 and 56 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Vialen in view of Castanho.

Claims 52-53 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Vialen in view of Mittal.

Claims 88-91 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Vialen in view of Schein.

The merits of these secondary references are discussed above, and will not be repeated here. As mentioned above, rather than curing the deficiencies of Vialen, the cited references are similarly defective. Therefore, Appellants submit that none of the secondary references cures the deficiencies of Vialen with respect to the independent claims from which these claims depend. The references fail to disclose, whether alone or in combination, at least one feature of the

invention as recited in independent claims 41, 60, and 643, and so fail to support a rejection of these dependent claims.

In conclusion, Appellants respectfully submit that all appealed claims in this application are patentable and request that the Board of Patent Appeals and Interferences overrule the Examiner and direct allowance of the rejected claims.

A single copy of this correct brief is submitted as per 37 C.F.R. §41.37(a). Appellant believes that no fee is required, as the fee of \$500.00 to cover the appeal fee for one other than a small entity as specified in 37 C.F.R. §1.17(c) was submitted with the originally filed Brief. Please charge any shortages and credit any overcharges to our Deposit Account No. 02-2666.

Respectfully submitted,
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN, LLP

Date: June 4, 2008

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I hereby certify that this correspondence is being submitted electronically via EFS Web on the date shown below.

Date: June 4, 2008

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VIII. CLAIMS APPENDIX

1. (Previously Presented) A method of operating a base station comprising:
Receiving a random access request for a traffic channel of a plurality of traffic channels on a first random traffic channel of the plurality of traffic channels, the traffic channels to be selectively allocatable by the base station for communication with a user terminal;
Determining whether a traffic channel of the plurality of traffic channels is available to allocate to the requestor; and
Communicating to the requestor whether a traffic channel of the plurality of traffic channels is available.
2. (Original) The method of claim 1 wherein:
Communicating includes denying the request for a channel.
3. (Original) The method of claim 1 wherein:
Communicating includes granting the request for a channel by assigning the first channel.
4. (Original) The method of claim 1 wherein:
Communicating includes granting the request for a channel by assigning a second channel and the first channel.
5. (Original) The method of claim 1 wherein:
Communicating includes granting the request for a channel by assigning a second channel instead of the first channel.
6. (Original) The method of claim 1 wherein:
Determining includes evaluating a load of the system.
7. (Original) The method of claim 1 wherein:
Determining includes evaluating an emergency status of the request.
8. (Original) The method of claim 1 wherein:
Determining includes evaluating a status of a subscriber from whom the request originates.
9. (Original) The method of claim 8 wherein:
Evaluating the status includes evaluating the subscription terms of the subscriber.
10. (Original) The method of claim 8 wherein:
Evaluating the status includes evaluating the payment history of the subscriber.

11. (Original) The method of claim 1 wherein:
Determining includes evaluating a nature of the request.
12. (Original) The method of claim 11 wherein:
The nature of the request includes a high bandwidth requirement.
13. (Original) The method of claim 11 wherein:
The nature of the request includes a low bandwidth requirement.
14. (Original) The method of claim 11 wherein:
The nature of the request includes a set of capabilities of equipment used to make the request.
15. (Original) The method of claim 3 further comprising:
Receiving a request for a third channel of the plurality of channels upon assigning of the first channel;
Determining whether a third or fourth channel of the plurality of channels is available;
and
Communicating to the requestor the third channel availability or fourth channel availability.
16. (Previously Presented) A method of operating a user terminal comprising:
Sending a request for a first unallocated traffic channel of a plurality of traffic channels on the first unallocated traffic channel to access a network; and
Receiving an indication of availability of a traffic channel of the plurality of traffic channels.
17. (Original) The method of claim 16 wherein:
The request including a subscriber identification.
18. (Original) The method of claim 16 wherein:
The request including an emergency code.
19. (Original) The method of claim 16 wherein:
The request including an equipment identification.
20. (Original) The method of claim 16 wherein:
The request including a training sequence.

21. (Original) The method of claim 16 wherein:
The indication signaling no channel is available.
22. (Original) The method of claim 16 wherein:
The indication signaling the first channel is available.
23. (Original) The method of claim 16 wherein:
The indication signaling a second channel of the plurality of channels is available.
24. (Original) The method of claim 23 wherein:
The indication signaling the first channel is also available.
25. (Original) The method of claim 22 further comprising:
Communicating using the first channel.
26. (Original) The method of claim 23 further comprising:
Communicating using the second channel.
27. (Original) The method of claim 24 further comprising:
Communicating using the first channel and the second channel.
28. (Original) The method of claim 25 further comprising:
Sending a request for a third channel of the plurality of channels; and
Receiving an indication of availability of a channel of the plurality of channels.
29. (Original) The method of claim 28 wherein:
The indication signaling the third channel is not available.
30. (Original) The method of claim 28 wherein:
The indication signaling the third channel is available.
31. (Original) The method of claim 28 wherein:
The indication signaling a fourth channel is available.
32. (Original) The method of claim 21 further comprising:
Waiting an inter-channel delay;
Sending a request for a third channel of the plurality of channels on the third channel;
Receiving an indication of availability of a channel of the plurality of channels.
33. (Original) The method of claim 32 wherein:
the indication signaling the third channel is not available;
determining no other channels may be requested;
waiting an inter-attempt delay; and

sending a request for the first channel on the first channel.

34. (Previously Presented) A method of providing access to a network comprising:
receiving a request for access on a first random traffic channel of a plurality of channels at random from a network subscriber, each channel of the plurality of channels suitable for accessing the network; and

granting access to the network on a channel of the plurality of channels based on an evaluation of factors.

35. (Original) The method of claim 34 wherein:

The factors include subscriber status, subscriber equipment, network loading, type of service requested, geographic location of the request, geographic location of the responding equipment, connection quality, usage history of the subscriber, and emergency status of the request.

36. (Previously Presented) A method of accessing a network comprising:

requesting access to the network on a first random traffic channel of a plurality of channels, each channel of the plurality of channels suitable for accessing the network; and

receiving access to the network on a channel of the plurality of channels based on an evaluation of factors.

37. (Original) The method of claim 36 wherein:

The factors include subscriber status, subscriber equipment, network loading, and emergency status of the request.

38. (Original) The method of claim 36 wherein:

The request includes information related to equipment used by a subscriber making the request.

39. (Original) The method of claim 8 wherein:

Evaluating the status includes evaluating the usage history of the subscriber.

40. (Original) The method of claim 1 wherein:

Determining includes evaluating the radio frequency characteristics of the request.

- 41.** (Previously Presented) A method comprising:
- Receiving a request for an access channel of a plurality of channels on a first unallocated channel of the plurality of channels;
 - Determining whether an access channel of the plurality of channels is available; and
 - Communicating to the requestor whether an access channel of the plurality of channels is available.
- 42.** (Original) The method of claim 41 wherein:
- Communicating includes denying the request for a channel.
- 43.** (Original) The method of claim 41 wherein:
- Communicating includes granting the request for a channel by assigning the first channel.
- 44.** (Original) The method of claim 41 wherein:
- Communicating includes granting the request for a channel by assigning a second channel and the first channel.
- 45.** (Original) The method of claim 41 wherein:
- Communicating includes granting the request for a channel by assigning a second channel instead of the first channel.
- 46.** (Original) The method of claim 41 wherein:
- Determining includes evaluating a load of the system.
- 47.** (Original) The method of claim 41 wherein:
- Determining includes evaluating an emergency status of the request.
- 48.** (Original) The method of claim 41 wherein:
- Determining includes evaluating a status of a subscriber from whom the request originates.
- 49.** (Original) The method of claim 48 wherein:
- Evaluating the status includes evaluating the subscription terms of the subscriber.
- 50.** (Original) The method of claim 48 wherein:
- Evaluating the status includes evaluating the payment history of the subscriber.
- 51.** (Original) The method of claim 41 wherein:
- Determining includes evaluating a nature of the request.
- 52.** (Original) The method of claim 51 wherein:
- The nature of the request includes a high bandwidth requirement.

- 53.** (Original) The method of claim 51 wherein:
The nature of the request includes a low bandwidth requirement.
- 54.** (Original) The method of claim 51 wherein:
The nature of the request includes a set of capabilities of equipment used to make the request.
- 55.** (Original) The method of claim 43 further comprising:
Receiving a request for a third channel of the plurality of channels upon assigning of the first channel;
Determining whether a third or fourth channel of the plurality of channels is available;
and
Communicating to the requestor the third channel availability or fourth channel availability.
- 56.** (Original) The method of claim 48 wherein:
Evaluating the status includes evaluating the usage history of the subscriber.
- 57.** (Original) The method of claim 41 wherein:
Determining includes evaluating the radio frequency characteristics of the request.
- 58.** (Original) The method of claim 41 wherein:
Communicating includes at least one of: denying the request for a channel, granting the request for a channel by assigning the first channel, granting the request for a channel by assigning a second channel and the first channel, or granting the request for a channel by assigning a second channel instead of the first channel.
- 59.** (Original) The method of claim 41 wherein:
Determining includes at least one of: evaluating the radio frequency characteristics of the request, evaluating a load of the system, evaluating an emergency status of the request, evaluating a status of a subscriber from whom the request originates, or evaluating a nature of the request.
- 60.** (Previously Presented) An apparatus comprising:
means for receiving a request for an access channel of a plurality of channels on a first unallocated channel of the plurality of channels;

means for determining whether an access channel of the plurality of channels is available;
and

means for communicating to the requestor whether an access channel of the plurality of channels is available.

61. (Original) The apparatus of claim 60 wherein:

the means for communicating includes a means for assigning a channel of the plurality of channels.

62. (Original) The apparatus of claim 60 wherein:

the means for determining includes a means for evaluating a status of a network, a means for evaluating a status of a request, a means for evaluating a status of a subscriber, a means for evaluating a usage history of a subscriber and a means for evaluating a radio frequency characteristic of a request.

63. (Previously Presented) A system comprising:

a processor; and

a network interface coupled to the processor;

wherein the processor and the network interface are collectively configured to:

receive a request for an access channel of a plurality of channels on a first unallocated channel of the plurality of channels;

determine whether an access channel of the plurality of channels is available; and

communicate to the requestor whether an access channel of the plurality of channels is available.

64. (Previously Presented) A machine-readable medium embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, the method comprising:

Receiving a random access request for a traffic channel of a plurality of traffic channels on a first random traffic channel of the plurality of channels, the traffic channels to be selectively allocatable by the base station for communication with a user terminal;

Determining whether a channel of the plurality of channels is available to allocate to the requestor; and

Communicating to the requestor whether a channel of the plurality of channels is available.

65. (Original) The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:

Communicating includes denying the request for a channel.

66. (Original) The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:

Communicating includes granting the request for a channel by assigning the first channel.

67. (Original) The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:

Communicating includes granting the request for a channel by assigning a second channel and the first channel.

68. (Original) The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:

Communicating includes granting the request for a channel by assigning a second channel instead of the first channel.

69. (Original) The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:

Determining includes evaluating a load of the system.

70. (Original) The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:

Determining includes evaluating an emergency status of the request.

71. (Original) The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:

Determining includes evaluating a status of a subscriber from whom the request originates.

72. (Original) The machine-readable medium of claim 71 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:

Evaluating the status includes evaluating the subscription terms of the subscriber.

73. (Original) The machine-readable medium of claim 71 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:

Evaluating the status includes evaluating the payment history of the subscriber.

74. (Original) The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:

Determining includes evaluating a nature of the request.

75. (Original) The machine-readable medium of claim 74 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:

The nature of the request includes a high bandwidth requirement.

76. (Original) The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:

The nature of the request includes a low bandwidth requirement.

77. (Original) The machine-readable medium of claim 74 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:

The nature of the request includes a set of capabilities of equipment used to make the request.

78. (Original) The machine-readable medium of claim 66 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:

Receiving a request for a third channel of the plurality of channels upon assigning of the first channel;

Determining whether a third or fourth channel of the plurality of channels is available;
and

Communicating to the requestor the third channel availability or fourth channel availability.

79. (Original) The machine-readable medium of claim 71 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:

Evaluating the status includes evaluating the usage history of the subscriber.

80. (Original) The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:

Determining includes evaluating the radio frequency characteristics of the request.

81. (Original) The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:

Communicating includes at least one of: denying the request for a channel, granting the request for a channel by assigning the first channel, granting the request for a channel by assigning a second channel and the first channel, or granting the request for a channel by assigning a second channel instead of the first channel.

82. (Original) The machine-readable medium of claim 64 further embodying instructions, the instructions, when executed by a processor, causing the processor to perform a method, wherein:

Determining includes at least one of: evaluating the radio frequency characteristics of the request, evaluating a load of the system, evaluating an emergency status of the request, evaluating a status of a subscriber from whom the request originates, or evaluating a nature of the request.

83. (Original) The method of claim 41 wherein:

the request implies a request for any channel of the plurality of channels.

84. (Original) The method of claim 41 wherein:

the request implies a request for the first channel of the plurality of channels.

85. (Original) The method of claim 41 wherein:

the request encodes a desired channel of the plurality of channels.

86. (Previously Presented) The method of claim 1, further comprising calculating a set of spatial multiplexing weights and a set of spatial demultiplexing weights associated with the request.

87. (Previously Presented) The method of claim 1, wherein communicating to the requestor includes using the set of spatial multiplexing weights to tailor a multi-lobe antenna radiation pattern.

88. (Previously Presented) The method of claim 41, further comprising calculating a set of spatial multiplexing weights and a set of spatial demultiplexing weights associated with the request.

89. (Previously Presented) The method of claim 41, wherein communicating to the requestor includes using the set of spatial multiplexing weights to tailor a multi-lobe antenna radiation pattern.

90. (Previously Presented) The apparatus of claim 60, further comprising means for calculating a set of spatial multiplexing weights and a set of spatial demultiplexing weights associated with the request.

91. (Previously Presented) The apparatus of claim 60, wherein the means for communicating to the requestor includes a means for employing the set of spatial multiplexing weights to tailor a multi-lobe antenna radiation pattern.

IX. EVIDENCE APPENDIX

None.

X. RELATED PROCEEDINGS APPENDIX

None.